o and all Mi	umber: 10 019 817 Selled by: M. SPEWEN (STIC 51-61)
Servain	Changed a file from non-ASCII to ASCII Verified by: (STIC staff)
	Changed the margins in cases where the sequence text was manner on the next line.
. 🗆	Edited a format error in the Current Application Datasection, specifically:
	Edited the Current Application Data section with the actual current number. The number inputted by the applicant was the prior application data; or other
	Added the mandatory heading and subheadings for "Current Application Data".
	Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
	Changed the spelling of a mandatory field (the headings or subheadings), specifically:
	Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:
	Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:
	Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
	Inserted colons after headings/subheadings. Headings edited included:
	Deleted extra, invalid, headings used by an applicant, specifically:
	Deleted: non-ASCII "garbage" at the beginning end of files; secretary initials/filename at end of file; page numbers throughout text; other invalid text, such as
	Inserted mandatory headings, specifically:
	Corrected an obvious error in the response, specifically:
	Edited identifiers where upper case is used but lower case is required, or vice versa.
	Corrected an error in the Number of Sequences field, specifically:
	A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
	Deleted ending stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a Patentin bug). Sequences corrected:
	Other:
٠	
*Examin	er: The above corrections must be communicated to the applicant in the first Office 3/1/95 Action. DO NOT send a copy of this form.



PCT10

RAW SEQUENCE LISTING DATE: 07/05/2002 PATENT APPLICATION: US/10/019,817 TIME: 11:00:40

Input Set : A:\ptoms.txt

Output Set: N:\CRF3\07052002\J019817.raw

```
3 <110> APPLICANT: Soci,t, des Produits Nestl, S.A.
      5 <120> TITLE OF INVENTION: The Lactose operon of Lactobacillus delbrueckii and its
              use for controlling gene transcription and/or
              expression in bacterial cells
      9 <130> FILE REFERENCE: 112843-039
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/019,817
C--> 12 <141> CURRENT FILING DATE: 2002-05-13
    14 <150> PRIOR APPLICATION NUMBER: 99112471.0
    15 <151> PRIOR FILING DATE: 1999-06-30
    17 <160> NUMBER OF SEQ ID NOS: 22
    19 <170> SOFTWARE: PatentIn Ver. 2.1
    21 <210> SEQ ID NO: 1
    22 <211> LENGTH: 1435
    23 <212> TYPE: DNA
    24 <213> ORGANISM: Lactobacillus delbrueckii
    26 <400> SEOUENCE: 1
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    28 actgaataat gctacaattg acttaacagc ataaaatttt agtaaaagcg agtgaagaag 120
    29 atggcaacga tcagagaagt ggccaaggca gccggcgtgt cgccagcgac ggtttcccgg 180
    30 gtcttgaact atgaccagac cctgtcggtc aatgaggcaa cgcggcagaa gatattcaaa 240
    31 actgctgaag ccatgcacta ccataagagc cggaagacca gaaagagcaa gcaaaagcgc 300
    32 ctggcgatct gcctgtggtg tgaccaagac caggagatca aggacctcta ttactattca 360
    33 atcagaacca gcgcgcaagc agaggccaag aagcagggac ttgaaagcca ggtcatttat 420
    34 coggetgate etttgeeega teeagetget ttaageggga ttateatgat tggetaeeag 480
    35 cagtattege cagacegett gaatgaagte aaaaagtetg geetgeeeet ggtetttgte 540
    36 gatactgaca ccttaaaatt gggttactgc tcagttgtgg ctgactttgg ccaggccatg 600
    37 caggaggege tagaggtett etgggggeag ggeagggage ggategeeet tittggatggt 660
    38 gatttggaca gtaattttga taaaaacaac ttggtcgact tccgcttccg cgattataag 720
    39 aagageeteg eggeeegegg eeagtaegae eeggaettag tetatgttgg aaaetteaet 780
    40 cogcaatctg getatgaage cattaaagaa getettaagt eeggeteett eeegaaagee 840
    41 ttgattgcgg ctaatgacgc catggctatt ggagcattga aggcctttaa agaagctgga 900
    42 attaaagtcc cagaggacgt cagtctgatt tcttttaatg acacaacggc agcagaattt 960
    43 gccaacccag ccttgactag cgtacatgta gagacccagc agatgggccg agccagcgtc 1020
    44 aaggtcatga aagacctgct ggatgatgat gaagccggca cttacaaggt cactttccca 1080
    45 acaaaactcg tttaccggga atcttgccca aaagcataag ggcatagagc ataataacag 1140
    46 caaagaaata gettggagat tgattttete caagetattt ttegtatata ttatggetge 1200
    47 attetgttga teattettgg gaatgggaca getteaegaa egtggteeag ettgeagate 1260
    48 cagginated acceptional geoceatoring aagreggagt geggeacqtg ceqtactitt 1320
    49 ctcagggtcc caggtaccca ggagtagtcg tcccagggtt gaggcccqct tcttcqattt 1380
    50 gegeetteaa ggtgtegtag teagetteae gttetgatee geeatgattt eeegt
    53 <210> SEO ID NO: 2
    54 <211> LENGTH: 332
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55 <212> TYPE: PRT

RAW SEQUENCE LISTING DATE: 07/05/2002 PATENT APPLICATION: US/10/019,817 TIME: 11:00:40

Input Set : A:\ptoms.txt

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58 <400> SEQUENCE: 2
59 Met Ala Thr Ile Arg Glu Val Ala Lys Ala Ala Gly Val Ser Pro Ala
                                        10
62 Thr Val Ser Arg Val Leu Asn Tyr Asp Gln Thr Leu Ser Val Asn Glu
               20
                                   25
65 Ala Thr Arg Gln Lys Ile Phe Lys Thr Ala Glu Ala Met His Tyr His
            35
                                40
68 Lys Ser Arg Lys Thr Arg Lys Ser Lys Gln Lys Arg Leu Ala Ile Cys
                            55
71 Leu Trp Cys Asp Gln Asp Gln Glu Ile Lys Asp Leu Tyr Tyr Tyr Ser
                       70
74 Ile Arg Thr Ser Ala Gln Ala Glu Ala Lys Lys Gln Gly Leu Glu Ser
77 Gln Val Ile Tyr Pro Ala Asp Pro Leu Pro Asp Pro Ala Ala Leu Ser
              100
                                   105
80 Gly Ile Ile Met Ile Gly Tyr Gln Gln Tyr Ser Pro Asp Arg Leu Asn
                               120
           115
83 Glu Val Lys Lys Ser Gly Leu Pro Leu Val Phe Val Asp Thr Asp Thr
      130
                           135
86 Leu Lys Leu Gly Tyr Cys Ser Val Val Ala Asp Phe Gly Gln Ala Met
                      150
                                           155
89 Gln Glu Ala Leu Glu Val Phe Trp Gly Gln Gly Arg Glu Arg Ile Ala
                  165
                                       170
92 Leu Leu Asp Gly Asp Leu Asp Ser Asn Phe Asp Lys Asn Asn Leu Val
              180
                                   185
                                                       190
95 Asp Phe Arg Phe Arg Asp Tyr Lys Lys Ser Leu Ala Ala Arg Gly Gln
                              200
98 Tyr Asp Pro Asp Leu Val Tyr Val Gly Asn Phe Thr Pro Gln Ser Gly
                           215
                                               220
101 Tyr Glu Ala Ile Lys Glu Ala Leu Lys Ser Gly Ser Phe Pro Lys Ala
                                            235
102 225
                        230
104 Leu Ile Ala Ala Asn Asp Ala Met Ala Ile Gly Ala Leu Lys Ala Phe
                    245
                                        250
107 Lys Glu Ala Gly Ile Lys Val Pro Glu Asp Val Ser Leu Ile Ser Phe
               260
                                    265
110 Asn Asp Thr Thr Ala Ala Glu Phe Ala Asn Pro Ala Leu Thr Ser Val
           275
                                280
113 His Val Glu Thr Gln Gln Met Gly Arg Ala Ser Val Lys Val Met Lys
       290
                            295
                                                300
116 Asp Leu Leu Asp Asp Asp Glu Ala Gly Thr Tyr Lys Val Thr Phe Pro
                        310
117 305
119 Thr Lys Leu Val Tyr Arg Glu Ser Cys Pro Lys Ala
123 <210> SEQ ID NO: 3
124 <211> LENGTH: 6
125 <212> TYPE: DNA
126 <213> ORGANISM: Lactobacillus delbrueckii
128 <400> SEQUENCE: 3
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RAW SEQUENCE LISTING DATE: 07/05/2002 PATENT APPLICATION: US/10/019,817 TIME: 11:00:40

Input Set : A:\ptoms.txt

129	tgttta	6
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134	<212> TYPE: DNA	
135	<213> ORGANISM: Lactobacillus delbrueckii	
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	<210> SEQ ID NO: 5	
142	<211> LENGTH: 7	
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144	<213> ORGANISM: Lactobacillus delbrueckii	
146	<400> SEQUENCE: 5	
147	gtaaacg	7
150	<210> SEQ ID NO: 6	
151	<211> LENGTH: 17	
152	<212> TYPE: DNA	
153	<213> ORGANISM: Lactobacillus delbrueckii	
155	<400> SEQUENCE: 6	
156	cgcctggtga ttcagcc	17
159	<210> SEQ ID NO: 7	
160	<211> LENGTH: 20	
161	<212> TYPE: DNA	
162	<213> ORGANISM: Lactobacillus delbrueckii	
164	<400> SEQUENCE: 7	
165	agctttacgg ggaagtcggg	20
168	<210> SEQ ID NO: 8	
169	<211> LENGTH: 15	
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171	<213> ORGANISM: Lactobacillus delbrueckii	
173	<400> SEQUENCE: 8	
174	tgtaagcgta aacaa	15
177	<210> SEQ ID NO: 9	
178	<211> LENGTH: 98	
	<212> TYPE: DNA	
	<213> ORGANISM: Lactobacillus delbrueckii	
	<400> SEQUENCE: 9	
	tgtttactaa aaatattttg gtaaagcatc ttgatttgtt tagtaaacgg gtctatactg	
184	taagcgtaaa caagttagaa cacctaaagg agaaaatc	98
187	<210> SEQ ID NO: 10	
188	<211> LENGTH: 25	
	<212> TYPE: DNA	
190	<213> ORGANISM: Lactobacillus delbrueckii	
	<400> SEQUENCE: 10	۰.
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	<210> SEQ ID NO: 11	
	<211> LENGTH: 25	
	<212> TYPE: DNA	
	<213> ORGANISM: Lactobacillus delbrueckii	
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RAW SEQUENCE LISTING DATE: 07/05/2002 PATENT APPLICATION: US/10/019,817 TIME: 11:00:40

Input Set : A:\ptoms.txt

		25
	ataaataagc ttacagaatg cagcc	13
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	<211> LENGTH: 27	
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	<210> SEQ ID NO: 13	
	<211> LENGTH: 27	
	<211> HENGIR. 27 <212> TYPE: DNA	
210	<213> ORGANISM: Lactobacillus delbrueckii	
	<400> SEQUENCE: 13	
213	atattagaat tcagtacttt gacaccg	27
	<210> SEQ ID NO: 14	
	<211> LENGTH: 27	
	<212> TYPE: DNA	
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	<400> SEQUENCE: 14	
220	atattagaat tcaagaggct atatcgc	27
232	<210> SEQ ID NO: 15	
	<211> LENGTH: 18	
	<212> TYPE: DNA	
235	<213> ORGANISM: Lactobacillus delbrueckii	
	<400> SEQUENCE: 15	
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	<210> SEQ ID NO: 16	
	<211> LENGTH: 25	
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244	<213> ORGANISM: Lactobacillus delbrueckii	
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247	ataaatctgc agtgggtatg gtggc	25
	<210> SEQ ID NO: 17	
	<211> LENGTH: 22	
252	<212> TYPE: DNA	
	<213> ORGANISM: Lactobacillus delbrueckii	
	<400> SEQUENCE: 17	22
256	gatcgttgcc acattcacca cc	<i>L L</i>
	<210> SEQ ID NO: 18	
	<211> LENGTH: 21	
261	<212> TYPE: DNA	
	<213> ORGANISM: Lactobacillus delbrueckii	
	<400> SEQUENCE: 18	21
	ggtgaatgtg gcaacgatca g	
	<210> SEQ ID NO: 19	
	<211> LENGTH: 25	
2/0	<212> TYPE: DNA <213> ORGANISM: Lactobacillus delbrueckii	
	<213> ORGANISM: Daetobaelilus delbideskii <400> SEQUENCE: 19	
2/3	atattactgc agacagaatg cagcc	25
2/4	acaccaccyc agadagaacy ongoo	

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/019,817

DATE: 07/05/2002 TIME: 11:00:40

Input Set : A:\ptoms.txt

	<210> SEQ ID NO: 20 <211> LENGTH: 25	
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280	<213> ORGANISM: Lactobacillus delbrueckii	
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286	<210> SEQ ID NO: 21	
287	<211> LENGTH: 25	
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289	<213> ORGANISM: Lactobacillus delbrueckii	
291	<400> SEQUENCE: 21	٥.
292	atattactcg agacagaatg cagcc	25
295	<210> SEQ ID NO: 22	
296	<211> LENGTH: 98	
	<212> TYPE: DNA	
298	<213> ORGANISM: Lactobacillus delbrueckii	
300	<400> SEQUENCE: 22	
301	tgtttactaa aaatattttg gtaaagcatc ttgatttgtt tagtaaacgg gtctatactg	60
302	taagcgtaaa caagttagaa cacctaaagg agaaaatc	98

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/019,817

DATE: 07/05/2002 TIME: 11:00:41

Input Set : A:\ptoms.txt

Output Set: N:\CRF3\07052002\J019817.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application Number L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date